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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,891	08/14/2001	Monte Mar	CYPR-CD00226	9277

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EXAMINER

MAI, TAN V

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/929,891	Applicant(s) MAR ET AL.	
	Examiner Tan V Mai	Art Unit 2124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/11/03, 12/26/02 & 1/15/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
~~Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).~~
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/11/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per independent claims 1 & 10, the terms "can be" are indefinite.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6, 8-19 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al.

As per independent claim 1, Ryan et al disclose, e.g., see Figs. 3A-3B and 4A-4B, the reconfigurable test instrument having a **programmable analog system** substantially as claimed, including: a reconfigurable hardware modulo (RHM) 325 and reconfigurable front end (RFE) 330. Also, see col. 8, lines 47-58, col. 9, line 37 to col. 10, line 6 and col. 10, lines 44-51. It is noted that Ryan et al do not specifically detail the claimed "configuration registers"; however, Ryan et al should have "means" for providing the instruction(s) to selectively connect the desired hardware. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Ryan et al's teachings because the reference is a reconfigurable test instrument having a **programmable analog system** as claimed.

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As per claim 2, the claim adds the "plurality of analog elements having changeable characteristics". Ryan et al disclose "[a]n FPAA is an integrated circuit which can be configured to implement various analog functions ..." (col. 10, lines 44-51). It implies that the FPAA has changeable characteristic as claimed.

As per claim 3, the claim adds "configuration registers are dynamically programmable". The feature is old and well known in the art, e.g., RAM is a dynamically programmable element.

As per claim 4, the claim adds "inputs and outputs of each analog block are specified according to said information in said configuration registers". Although Ryan et al do not disclose "configuration registers", Ryan et al's **programmable analog system** should have these features.

As per claim 6, the claim adds "wherein said first set of analog blocks a first type and a second type". Ryan et al's reconfigurable hardware module (RHM) 325 and a reconfigurable front end (RFE) 330 are considered the claimed features.

As per claims 8-9, the claim add "first register bank and a second register bank coupled to said plurality of configuration registers, ... comprising **address...**". The feature is old and well known in the art, e.g., RAM should have address generator feature.

Due to the similarity of claims 10-19 and 22-23 to claims 1-3, 6 and 8-9, they are rejected under a similar rationale.

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4. Claims 5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al in view of either Anderson or Swanson.

Ryan et al have been discussed in paragraph 3 above.

As per claim 5, the claim adds the "first set of analog blocks comprises switched capacitor blocks". The "switched capacitor" is old and well known in the art, e.g., see Anderson (col. 1, lines 20-27, col. lines 20-39, col. 4, line 60 to col. 5, line 18) or Swanson (col. 2, lines 52-63, col. 8, line 63 to col. 9, line 14, col. 24, line 45 to col. 25, line 30 and col. 30, lines 43-53). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine either Anderson or Swanson's "switched capacitor" feature in Ryan et al, thereby making the claimed invention, because the proposed device is a reconfigurable test instrument having a **programmable analog system** as claimed.

Due to the similarity of claim 20 to claim 5, it is rejected under a similar rationale.

5. Claims 7, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al in view of Gorecki.

Ryan et al have been discussed in paragraph 3 above.

As per claim 7, the claim adds "wherein said second set of analog blocks comprises continuous time blocks". The continuous time feature is old and well known in the art, e.g., see Gorecki's Fig. 6. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Gorecki's "continuous time" feature in Ryan et al, thereby making the claimed invention, because

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the proposed device is a reconfigurable test instrument having a **programmable analog system** as claimed.

Due to the similarity of claim 21 to claim 7, it is rejected under a similar rationale.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (703) 305-9761. The examiner can normally be reached on Tue-Fri from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are:

Official

(703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



TAN V. MAI
PRIMARY EXAMINER